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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,595	12/15/2003	Hiroshi Watanabe	062709-0122	1453
22428	7590	01/21/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			JULES, FRANTZ F	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/734,595

Applicant(s)

WATANABE, HIROSHI

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## REASON FOR ALLOWANCE

### *Specification*

1. The disclosure is objected to because of the following informalities:

On page 3, line 21, the specification contains words in a phrase that are written without spacing in between (31 to 34 installed on four tires 21 to 24 of the vehicle P). This is problem is found throughout the specification as well as in the abstract.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al (US 5,612,671) in view of Kyrtos (US 6,072,388).

#### Claims 1-2

Mendez et al discloses a tire pressure detecting apparatus for a vehicle comprising a terminal attached to at least one tire being fitted in a given area of the vehicle, the terminal having a tire pressure sensor configured to detect a tire pressure and a transmitter configured to transmit tire pressure data based on the detected tire pressure; a receiver attached to a part of the vehicle in at least one of the areas and configured to receive the tire pressure data transmitted from any one of the transmitters and detect a

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reception level of the received tire pressure data; and a controller (20) configured for obtaining tire pressure data from one of the receivers.

Mendez et al teach all of the features as listed above but does not disclose a tire pressure detecting apparatus in which data received from the sensors are compared to existing data and sent to a display. The general concept of providing comparing tire data in a controller is well known in the art as illustrated by Kyrtos which discloses the teaching of comparing tire pressure sensor data to existing data and displaying data. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mendez et al to include the use of comparing data received from the tire sensors in the controller and displaying data in his advantageous tire pressure detecting system as taught by Kyrtos in order to improve the performance of the system by eliminating errors in the data, increase the safety of the vehicle.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al (US 5,612,671) in view of Rambock et al (DE 42 32 240 A1).

Claims 1-2

Mendez et al discloses a tire pressure detecting apparatus for a vehicle comprising a terminal attached to at least one tire being fitted in a given area of the vehicle, the terminal having a tire pressure sensor configured to detect a tire pressure and a transmitter configured to transmit tire pressure data based on the detected tire pressure; a receiver attached to a part of the vehicle in at least one of the areas and configured to receive the tire pressure data transmitted from any one of the transmitters and detect a

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reception level of the received tire pressure data; and a controller (20) configured for obtaining tire pressure data from one of the receivers.

Mendez et al teach all of the features as listed above but does not disclose a tire pressure detecting apparatus in which data received from the sensors are compared to existing data. The general concept of providing comparing tire data in a controller is well known in the art as illustrated by Kyrtos which discloses the teaching of comparing tire pressure sound data to existing data. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mendez et al to include the use of comparing data received from the tire sensors in the controller in his advantageous tire pressure detecting system as taught by Kyrtos in order to improve the performance of the system by eliminating errors in the data.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al (US 5,612,671) and Kyrtos (US6,072,388) as applied to claim 1 and in view of Ceresoli et al (US 2004/0127192).

Mendez et al and Kyrtos teach all the limitations of claim 3 except for a tire pressure detecting apparatus wherein the receiver has an RSSI circuit configured to detect the

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reception level. The general concept of providing an RSSI circuit configured to detect the reception level of a receiver in a vehicle is well known in the art as illustrated by Ceresoli et al which disclose the teaching of an RSSI circuit configured to detect the reception level of a radio. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mendez et al to include the use of an RSSI circuit configured to detect the reception level of the receiver of his advantageous tire pressure detecting apparatus as taught by Ceresoli et al in order to provide more accurate detection of selected radio station.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Aduddell, Hill, Jo et al, Tang et al, Nantz et al are cited to show related system and method for monitoring vehicle tire comprising receivers and controllers.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules  
Primary Examiner  
Art Unit 3617

FFJ

January 14, 2005

**FRANTZ F. JULES**  
**PRIMARY EXAMINER**  
